From: Eberhardt, Maja
To: ctanaka@sbtribes.com
Cc: Kissinger, Lon; Macchio, Lisa

**Subject:** RE: WQS language

**Date:** Thursday, June 27, 2019 2:27:00 PM

Attachments: ShoBan HHC-Arsenic dioxin thallium calcs DRAFT.xlsx

## Hi Candon,

Attached please find a spreadsheet as you requested that provides calculations for arsenic, dioxin, and thallium HHC based on inputs used for our current 304(a) recommendations. I also included the inputs that I believe you are using for FCRs, drinking water intake, etc. This spreadsheet is for informational purposes only. As we discussed, the formulas are functional so you can change the inputs as needed.

Please let me know if you have any questions and also please keep me apprised of your schedule so I can try to get reviews scheduled here in advance, to the extent possible on all sides. I look forward to seeing your WQS.

Best wishes,

Maja

\_\_\_\_\_

Maja Eberhardt

Standards and Assessment Section

Water Division

U.S. EPA Region 10

1200 6th Avenue, Suite 155 Seattle, WA 98101-1128

Tel. 206-553-6265

From: Candon Tanaka <ctanaka@sbtribes.com>

**Sent:** Wednesday, June 26, 2019 7:07 AM

To: Eberhardt, Maja <eberhardt.maja@epa.gov>

Subject: RE: WQS language

Maja,

Yes I should be in the office most of the day today. Just give me a call.

Thanks.

Candon Tanaka

Water Quality Specialist Shoshone-Bannock Tribes Phone: (208) 239-4582 Fax: (208) 239-4592

**From:** Eberhardt, Maja <<u>eberhardt.maja@epa.gov</u>>

**Sent:** Tuesday, June 25, 2019 5:19 PM

**To:** Candon Tanaka < <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a>>

Subject: RE: WQS language

Hi Candon,

Following up on your earlier questions, would you have time to talk about the arsenic, thallium, and dioxin HHC tomorrow late morning or in the afternoon after 2:30, or later in the week? Thanks.

**From:** Candon Tanaka < <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a>>

Sent: Thursday, June 13, 2019 7:31 AMTo: Macchio, Lisa < Macchio, Lisa@epa.gov >Cc: Eberhardt, Maja < eberhardt.maja@epa.gov >

**Subject:** RE: WQS language

Lisa,

That sounds great. Yes I can wait until then.

Thanks,

Candon Tanaka

Water Quality Specialist Shoshone-Bannock Tribes Phone: (208) 239-4582 Fax: (208) 239-4592

From: Macchio, Lisa < Macchio.Lisa@epa.gov>
Sent: Wednesday, June 12, 2019 4:55 PM
To: Candon Tanaka < ctanaka@sbtribes.com>
Cc: Eberhardt, Maja < eberhardt.maja@epa.gov>

Subject: RE: WQS language

Candon – I have set up an internal conversation for some folks here in the Region together with Maja and I for next week to discuss options regarding arsenic human health criteria. My hope is that we can develop some options/suggestions for you to consider with respect to arsenic human health criteria that we think would be protective. The goal is to provide you with that information after our internal discussion. Hope that's soon enough for you. If not please let me know.

Thanks

## Lisa Macchio

U.S. Environmental Protection Agency Water Divsion 1200 Sixth Avenue Seattle, WA 98101 (206) 553-1834 macchio.lisa@epa.gov

><(((((0>`.,,,.'-`.,.,.'-`....)><(((((0>

From: Candon Tanaka < <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a>>
Sent: Wednesday, June 12, 2019 3:47 PM

**To:** Eberhardt, Maja <<u>eberhardt.maja@epa.gov</u>> **Cc:** Macchio, Lisa <<u>Macchio, Lisa@epa.gov</u>>

Subject: RE: WQS language

Hello Maja,

Thank you for sending the information and no problem on the aluminum. The phone call with Rochelle went well and I think I have the cyanotoxins covered. Can you refresh my memory on why the HHC-arsenic, thallium, dioxin are not included in the tribal model? (Arsenic was an IRIS update issue correct?) And what my options are?

Thanks,

Candon Tanaka

Water Quality Specialist

Shoshone-Bannock Tribes Phone: (208) 239-4582 Fax: (208) 239-4592

**From:** Eberhardt, Maja <<u>eberhardt.maja@epa.gov</u>>

**Sent:** Tuesday, June 11, 2019 11:58 AM

**To:** Candon Tanaka < <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a> <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a> <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a> <a href="mailto:ctanaka@epa.gov">ctanaka@epa.gov</a> <a href="mailto:ctanaka@epa.gov">

Subject: RE: WQS language

Hi Candon,

Let me put a hold on the aluminum language briefly, I believe the toxicity response to hardness is not unidirectional for aluminum as it is for copper so a different approach may be needed for protective default inputs. Let me talk to others here and get back to you soon.

Thanks, sorry.

Maja

**From:** Eberhardt, Maja

Sent: Monday, June 10, 2019 4:44 PM

**To:** Candon Tanaka < <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a> <a href="mailto:ctanaka@sbtribes.com">ctanaka@sbtribes.com</a> <a href="mailto:ctanaka@epa.gov">ctanaka@epa.gov</a> <a href="mailto:ctanaka@epa.gov">ctanaka@epa.gov</a>

**Subject:** WQS language

Hi Candon,

Thanks for a good call today, we covered a lot of ground and I hope we were able to provide most of the information you need. I've attached the Swinomish language for their copper criteria, and language for the aluminum criteria that is parallel to the copper language for your consideration. The copper language includes basic implementation language and references EPA's default criteria document, and this language translates almost directly to the aluminum criteria. pH is important to aluminum toxicity, and is hard to predict using reference conditions, so it should be measured directly if possible.

Let me know if you would like assistance with human health criteria for arsenic, dioxin, and thallium. I'll wait to hear back from you about your discussion with Rochelle on the cyanotoxin criteria. Thanks! Please let me know if you have more questions. I'll look forward to seeing your draft standards.

## Maja

Maja Eberhardt
Standards and Assessment Section
Water Division
U.S. EPA Region 10
1200 6th Avenue, Suite 155
Seattle, WA 98101-1128
Tel. 206-553-6265